



State of Idaho
Department of Environmental Quality



Together, we have been working diligently over the past few years to improve our performance and service and have significant accomplishments to show for our efforts.

The Department of Environmental Quality (DEQ) has successfully realigned programs, prioritized concerns, and used the accounting system to more efficiently and effectively manage environmental issues. To improve the way we manage environmental projects, we have built solid relationships with local governments and individuals to find solutions that fit the issues.

For example, in the Coeur d'Alene Basin, DEQ is working with the local government to develop cleanup plans which meet local needs, some of which have already been successfully implemented in an effort to resolve environmental and public health issues as well as promote economic activity.

In southeast Idaho, we have taken a lead role in addressing the concerns about selenium. DEQ has negotiated voluntary agreements with participating companies and other agencies in order to establish strategies and coordinate activities to resolve this issue.

With our accounting system and centralized accounts payable and receivable structure, we can now provide more accurate information for proactive management of time and money spent on priority activities. In this time of limited financial resources, we are well prepared to focus existing funds toward meeting Idaho's environmental priorities through the Department's articulated strategy and structure.

Though much has been accomplished, we still have much to do. We must maintain a cooperative and proactive approach with the Department of Energy (DOE) to achieve an accelerated program of compliance with the settlement agreement between Idaho and DOE. Making continued advancements in our approach to protect ground water, we must work diligently to build a cohesive program that will address the long-term issue of ground water quality.

The DEQ Board is actively developing its long-term vision for Idaho. That plan will become the basis of future strategic efforts when completed.

We have come a long way, and our successes are the basis for taking our next steps with the challenges that lie ahead. We will forge ahead actively guiding the environmental future of Idaho. We, within the Agency, must continue to be proactive in achieving better service and efficiencies to our citizens. We have shown that we can meet those challenges and will do so in the future.

C. Stephen Allred Director, DEQ

#### **How to Contact DEQ**

**Address:** 1410 N. Hilton, Boise, ID 83706 **Telephone:** (208) 373-0502 **Website:** www.deq.state.id.us **Webmaster:** webmastr@deq.state.id.us

### 2003-2007 Strategic Plan

#### **Mission**

To protect human health and preserve the quality of Idaho's air, land and water for use and enjoyment today and in the future.

#### **Vision**

DEQ envisions a future for Idaho's citizens wherein quality of life is enhanced by the quality of the environment. We will assess, sustain, preserve, and enhance environmental qualities in partnership with communities and businesses, and in concert with the economic vitality of the state.

#### **Principles and Values**

DEQ's principles and values establish a framework for day-to-day activities and are integrated into all DEQ accomplishments. They guide our behavior and are important concepts considered in our decision-making.

- Rely on science and common sense to guide decisions and achieve results
- Manage proactively by utilizing prevention-based approaches
- Improve State/federal relationship to support State leadership
- Support local efforts to achieve and sustain a healthy environment and economy
- Serve and satisfy customers through simplicity, accountability, and predictability
- Recognize the role of Idaho's environmental assets in promoting economic vitality
- · Embrace diversity and promote teamwork
- Recognize DEQ's greatest resource by developing, attracting and retaining professional staff.



#### Infrastructure Improvements

DEQ will initiate a pilot project to provide access to comprehensive information to the public, industry, municipalities, and other governmental agencies. It will provide easier access to data and information on permits, monitoring, and other environmental actions and activities. Ultimately, the system will allow DEQ's customers to obtain information from their computers utilizing simple searches. The system will allow customers to perform business over the Internet.

Within the next year an electronic records management system will be functional. This will electronically track the flow of documents received and produced by the agency. The system will reduce the flow of paper within the organization and allow for better access to information.

An electronic filing system will be initiated. This will allow access to files from all employee workstations. This will include an agency-wide central filing system so all records will be housed and managed in an efficient and effective manner.

DEQ will also evaluate teleconferencing capabilities for the purpose of reducing travel costs and increasing efficiencies.

These infrastructure changes will aid DEQ in becoming more efficient and allowing customers easier access to data and information. It should also reduce the amount of paper consumed by the agency.

# Improve Environmental Quality in Areas Subject to Past or Present Mineral Extraction Activities

Mining in Idaho is in a transition phase. Metal prices and the economy have led to the reduction or closing of many mining activities. For over a century, many small communities' economies have been based on mining. The decline in the mining industry has had a significant impact on the availability of good jobs and a strong tax base to support public services. DEQ's efforts are aimed at proper closure of mines that are ceasing operations, and the remediation of contaminated waters and soil. A challenge facing the agency is the availability of resources, private and public, to fund cleanup activities.

DEQ brings stakeholders together to develop remedial plans that are acceptable to all. Cleanup processes are expedited by reaching consensus early in the process with local businesses, citizens, tribes, regulatory agencies and mining companies. DEQ is seeking innovative ways to implement cleanups that empower locals, provide economic benefits and meet objectives.

DEQ received a grant from the EPA to reinitiate a state-run preliminary assessment program. This gives the state a leadership role in the decision making process, in determining what sites are targeted for cleanup, and what activities are undertaken at contaminated sites.

The areas of emphasis are the Coeur d'Alene River Basin and the Southeast Idaho phosphate fields.

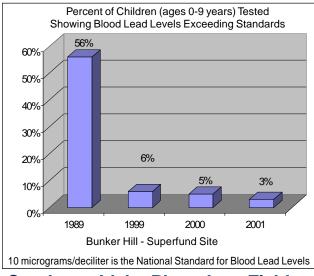
### Coeur d'Alene River Basin (Basin)

The Coeur d'Alene River Basin faces significant human health and environmental issues, due to past mining and smelting practices. The following five objectives have been identified to address environmental issues in the Coeur d'Alene Basin:

- Provide environmental improvement in the basin
- Resolve natural resource damage claims
- Create a trust fund that will fund cleanup
- Establish a locally-based commission that serves as the implementing organization, and
- Perform cleanup in a manner that supports economic improvement

On April 12, 2002, the Basin Environmental Improvement Project Commission was established. The Commission will be responsible for adopting and implementing a Basin Workplan to carry out the Record of Decision (ROD). A ROD is an administrative document specifying the direction for a project as determined by the lead management agency.

Remedial activities implemented by the Commission will be conducted in a way that will foster good working relationships among the stakeholders and promote a viable economy in the impacted communities while achieving cleanup objectives.



#### Southeast Idaho Phosphate Fields

In August of 2000, DEQ became the lead agency for the selenium area-wide investigation through voluntary agreements with area mining companies and interagency participants. DEQ worked with these groups to develop a scope of work and schedule for completing the area-wide investigation to support a regional risk-management plan, and to solicit input from mining companies, stakeholders and other parties.

Site-specific investigations will begin this year, and will be completed by 2008. These will identify specific areas of degradation where remedial activities are needed.

#### **Key Actions:** 1. Coeur d'Alene Basin Initiate first state-led yard remediation. This is the first step in a program to evaluate and control metals exposure to children from sources such as interior lead-based paint and drinking water wells. Complete the design for one large repository and identify 3 to 5 additional repository sites. Boundary Provide support for the Coeur d'Alene Basin Commission, by providing project management, fiscal and contracting support and assisting with project implementation. Oversee work to recontour and vegetate the Morning Mine Dump near Mullan. Finance the trust fund that was established by the legislature to support cleanup. Bonner 2. **Bunker Hill** Kootenai 2 Complete remediation work along McKinley Avenue and turn the property over to the City of Kelloga. Shoshone Initiate project to stabilize the bed and banks of the south Fork of the Coeur d'Alene River to prevent metals movement into the river system. Complete infrastructure plan in collaboration with local government and utility Latah districts. Identify potential funding sources, including Superfund, to Clearwater implement project. Complete first land transfer from the EPA to the State, then to a third party. Nez Perce The criteria used to prioritize land transfers are job creation potential, and the ability to improve the local tax base. De-list residential areas from Superfund. Idaho Southeast Idaho Lemhi **Phosphate Fields** 5 Complete Regional Risk Adams 4 11 Management Plan. Valley Conduct preliminary assessment screening at thirteen historic orphaned mine sites. Washington Conduct engineering evaluations/ Custer Clark corrective actions (EE/CA) for sites Fremont Payette ا Boise requiring remediation. Gem Obtain site-specific agreements with Madison mining companies for cleanup of Jefferson anyon priority mines. **10** Butte Formalize best-management Ada Bonneville practices (BMPs) for phosphate Blaine Elmore Bingham mining through Idaho Department of Lands (IDL) rule making. Gooding Lincoln **12** Establish a long-term monitoring Caribou program to ensure effectiveness of Minni doka Owyhee remedial actions. 3 Jerome Bannoc Bear Twin Falls Cassia Lake Oneida Franklin

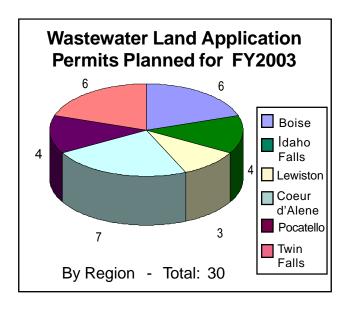
#### Mining Around Idaho

- 4. Blackbird Mine Complete ROD on remediation project.
- 5. Beartrack Mine Develop comprehensive closure plan and conduct closure plan evaluation.
- 6. Stibnite Mine Ensure cleanup of abandoned mill building, completion of phase two remedial actions and begin post-closure operations and maintenance.
- 7. Copper Cliffs Mine/Mill Remove chemicals and ensure that cleanup is completed.
- 8. Thompson Creek Mine Evaluate operational plan based on reduced mine life.
- 9. Grouse Creek Mine Develop alternatives for disposal of process wastewater, draft a site-wide closure plan, complete an EE/CA, and develop a comprehensive closure plan.
- 10. Triumph Mine Establish institutional controls so land owners have the ability to use their property.
- 11. Hecla Yellow Pine Mine Close out cyanide permit, and oversee final reclamation.
- 12. DeLamar Mine Ensure process wastewater ponds are emptied, and final closure on two acid-rock generating mine waste dumps is initiated.

## Improve Ground Water Quality in Identified Degraded Areas and Protect All Ground Water

The Idaho Ground Water Quality Plan directs DEQ's ground water protection and remediation strategies. DEQ works with the Idaho Department of Agriculture (IDA), the Idaho Department of Water Resources (IDWR) and the public to ensure ground water quality is protected or improved so it can be used for drinking water, municipalities, agriculture, and industry. In areas of Idaho, water management practices, land uses and natural conditions have led to contamination of ground water. Monitoring has identified areas of reduced ground water quality. DEQ focuses on preventing contamination, and on cleanup of contaminated areas. As a prevention strategy, DEQ's source water protection activities focus on identifying possible sources of contamination, then develop methods to prevent the contaminant from entering the ground water. The drinking water and wastewater grant and loan programs award resources to systems in order to facilitate planning, design and construction of new and existing infrastructure. These grants and loans help to meet the needs of Idaho citizens and aid in the protection of ground water and surface water resources.

DEQ ground water protection strategies for regulated facilities consist of writing rules and permits to control discharges that may impact ground water, inspecting the regulated facilities to ensure compliance with rules and permits, and providing technical assistance to help facilities find cost-effective methods of



compliance. These protective strategies are used to regulate facilities such as solid and hazardous waste management facilities, and facilities that land apply wastewater. DEQ has shifted resources to increase wastewater land application inspections, compliance activities, and permit development that will eliminate the backlog of expired permits. These shifts also allow DEQ to provide more technical support to facilities in managing odors from land application facilities.

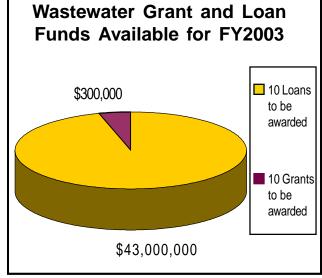




Photo taken by Tom Askew, Twin Falls Regional Office

In areas with the potential for non-point source contamination, DEQ works with locals to initiate best management practices aimed at reducing or preventing additional contaminants from entering the ground water. Twenty-five areas with nitrate contaminated ground water have been identified and prioritized. In these areas, DEQ helps form local advisory committees to identify land-use activities that increase nitrate levels, then develops specific management practices to reduce nitrate pollution. Sources of nitrates consist of fertilizer, animal waste,

process waste, wastewater land application and septic systems. DEQ uses ground water monitoring data to evaluate the effectiveness of the management practices.

In areas where high levels of contamination exist due to the release of contaminants from sources such as leaking underground storage tanks (LUSTs), chemical spills or illegal waste disposal, DEQ oversees remediation efforts to protect public health.

#### **Key Actions:**

- Develop plans for the Weiser and Lewiston regions and Salmon Falls/Rock Creek and four other nitrate priority areas.
- Complete a catalog of ground water BMPs and aerial applicator BMPs.
- Develop and implement a septic system plan to address reasonable access and alternative systems.
- Implement Ground Water Rule with other designated agencies.
- Implement risk-based corrective action standards for remediating soil and ground water, to establish consistent cleanup targets across remediation programs.

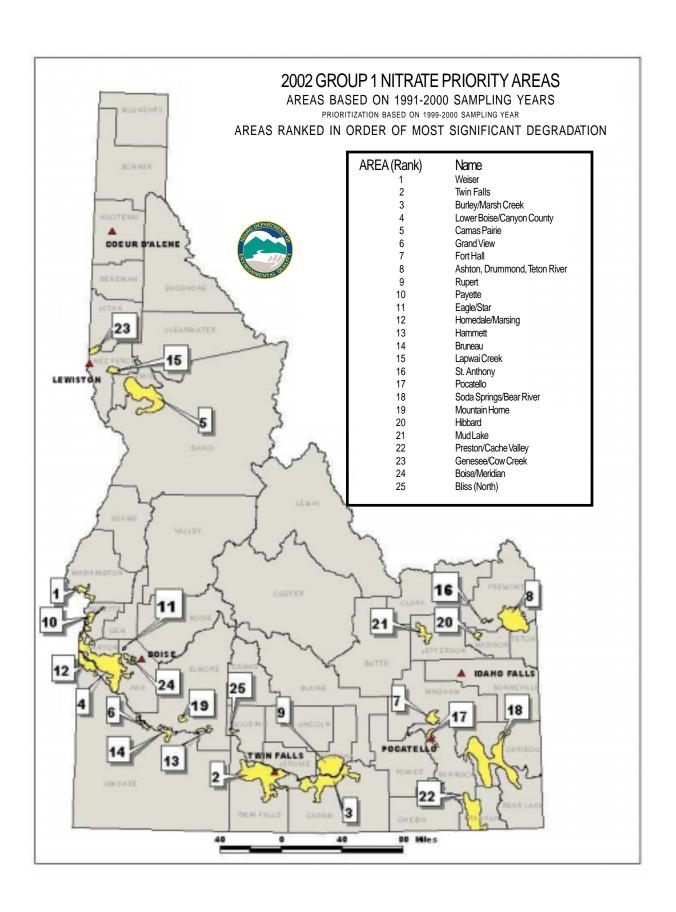
- Complete cleanup at 61 LUST sites.
- Present proposed rules and management plan for a state-run Underground Storage Tank (UST) program to the DEQ Board for recommendation to the legislature.
- Set up task forces to develop solutions for waste tire management and electronic waste management.
- Conduct approximately 70 wastewater land application inspections per year.
- · Issue approximately 30 protective land application permits per year.

#### **Reductions:**

- Reduce the development of Ground Water Protection Projects in the Idaho Falls, Twin Falls and Pocatello regions until funding becomes available.
- Eliminate the state Above-Ground Storage Tank Program. This will include the elimination of training, workshops for owners and operators, and program oversight.
- Postpone work on the Boise, Apple Street trichloroethylene, and the Garden City perchloroethylene remediation projects until funding becomes available.
- Reduce emergency response training, causing a reduction in our emergency response effectiveness.



Source for Ten Springs Fish Hatchery near Thousand Springs Photo taken by Rob Sharpnack, Twin Falls Regional Office

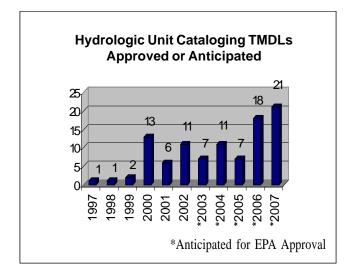


#### Improve the Surface Water Quality in Areas Identified as Not Supporting Their Beneficial Uses or Where the State Believes Threatened or Endangered Species Exist

Rivers, streams and lakes are an important part of Idaho's natural beauty and environmental quality. As such, the focus is on management strategies that maintain or improve surface water quality.

A statewide monitoring plan is being developed that will improve our ability to coordinate monitoring activities. DEQ conducts monitoring and collects data to determine if water bodies meet water quality standards and support beneficial uses. Beneficial uses include contact recreation like swimming and fishing, or the support of aquatic life. Water bodies that don't meet water quality standards or support beneficial uses are considered impaired.

Impaired water bodies are assessed to determine causes and sources of pollutants. A subbasin assessment is conducted for each impaired water body as a first step to either developing a pollution management plan, called a "Total Maximum Daily Load" (TMDL), or de-listing, if it fully supports its beneficial uses. A TMDL sets maximum allowable levels of sediment, metals, dissolved oxygen, temperature or pollutants. Once the TMDL is established, DEQ works with stakeholders to implement these plans that reduce pollutant loads to the water bodies. Point source pollutant discharges into U.S. waters are regulated by the National Pollutant Discharge Elimination System (NPDES). DEQ is evaluating assuming primacy of this program.



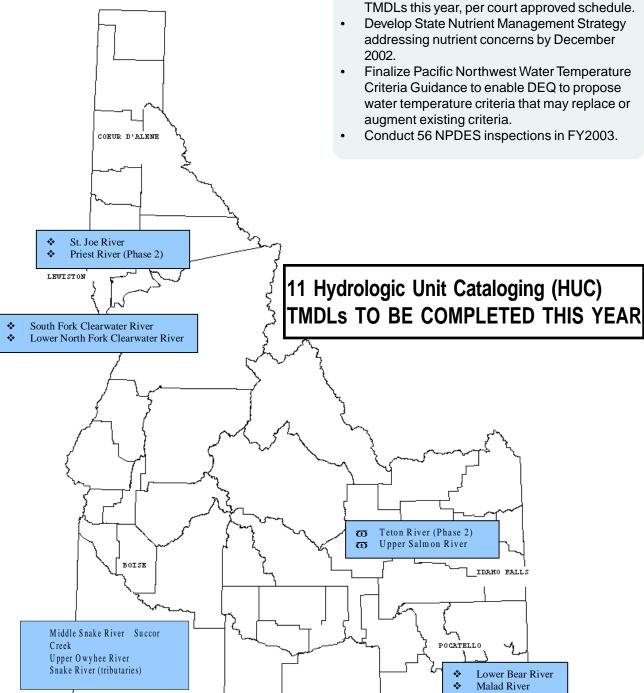


Cayuse Creek, Clearwater County Photo by Hudson Mann, Lewiston Regional Office

#### **Reductions:**

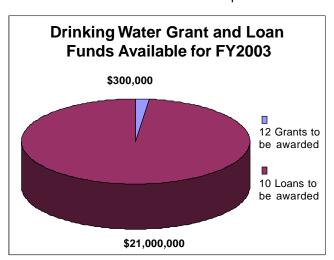
- Transfer Bull Trout efforts to the Office of Species Conservation.
- Discontinue USGS trend monitoring cost sharing for one year.
- Delay 401/NPDES activities to improve the certification and permitting process.
- Reduce American Falls Reservoir TMDL monitoring and Twin Falls area post-TMDL monitoring.
- Reduce and delay non-TMDL contracting in the Boise, Idaho Falls and Lewiston Regions.
- Reduce funding for Coeur d'Alene Lake management planning efforts and the Priest Lake non-TMDL efforts.
- Delay or reduce funding for water quality standards development.
- Reduce public outreach and Watershed Advisory Group (WAG) support and eliminate WAG facilitator support.
- Delay temperature standards development.
- Delay portions of the lake and reservoir evaluation criteria.

- Implement Water Body Assessment Guidance 2<sup>nd</sup> Edition (WBAG II) to enhance the consistency and methodology of assessment activities.
- Complete 11 Hydrologic Unit Cataloging (HUC)
   TMDLs this year, per court approved schedule.



## Protect Public Health by Maintaining or Improving the Quality of Idaho's Drinking Water

DEQ will achieve the goal of ensuring safe and affordable drinking water for all Idahoans through outreach and education efforts, providing technical assistance, offering infrastructure planning grants and low interest loans, and developing and implementing Drinking Water Protection Plans (DWPPs). Protection of public health will be accomplished through assuring public water systems (PWSs) compliance with drinking water standards, and by providing low-cost financing for needed infrastructure improvements. The success of these efforts will be measured by the absence of waterborne illnesses, the percent of PWSs in compliance with safe drinking water regulations and a decrease in number of public health notices that indicate threats to public health.





Water Filling Station at Athol, Idaho Photo taken by John Tindall, Coeur d'Alene Regional Office

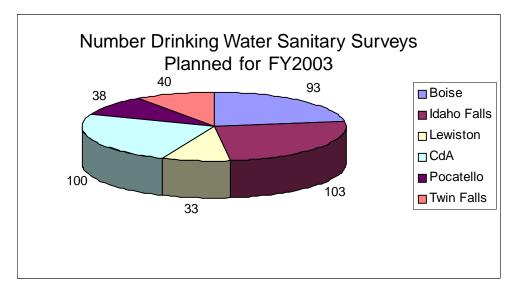


Photo courtesy of Boise Regional Office

Additional drinking water rules will be promulgated and implemented to improve public health protection. There is concern that the actual public health benefits gained by these new federal drinking water rules may not outweigh the economic hardships being placed on small communities that are struggling to keep compliant drinking water systems. To offset the burden placed on PWSs, public education and technical assistance will be provided, and regulatory flexibility for smaller PWSs will be explored. Opportunities to make production of safe drinking water more affordable, especially for the small water systems, will be evaluated.

The assessments of all public drinking water sources will be completed by May 2003. We will then begin developing and implementing DWPPs. Protection of drinking water sources is a cost-effective method to ensure sources are not contaminated, thus avoiding expensive treatment. DEQ will continue to provide technical assistance and education to communities to develop and implement State-certifiable DWPPs.

- In collaboration with other groups, complete 17 Drinking Water Protection Plans.
- Make source water assessment/protection information available to facilitate planning efforts.
- Provide technical assistance to 80 of the smaller, least capable PWSs to improve operation and maintenance.
- Provide training to and certification of operators of PWSs to help develop self-sufficiency and knowledge
  of water quality and public health issues.
- Issue 12 planning grants and 10 design and construction loans to improve drinking water system infrastructure. DEQ currently has \$16 M in application requests "in-hand" for State Fiscal Year 2003.
- Perform sanitary survey inspections on 20 percent of the PWSs annually (407 in FY2003) to ensure systems are properly operated and maintained and are producing safe drinking water.
- Perform 1,029 plan and specification reviews in FY2003 to ensure proper facility design and construction.
- Perform 216 determinations to evaluate potential ground water under the direct influence of surface water to ensure that ground water sources are not contaminated with pathogens such as giardia lamblia.
- Evaluate methods to improve security for PWSs.





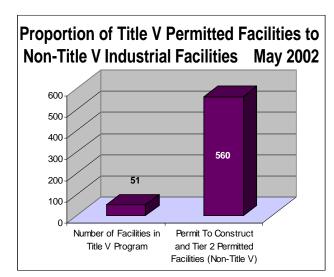
One Million Gallon Drinking Water Reservoir, Tubbs Hill Photo taken by Tony Davis, Coeur d'Alene Regional Office

# Attain or Maintain Air Quality Standards in All of Idaho's Airsheds

Management of Idaho's air quality is in a transitional phase as we complete issuance of the initial Title V operating permits by December 2002 and move into the Title V implementation phase. The Title V program is an integrated approach for air pollution management of Idaho's largest industrial sources. The Title V permits establish clear requirements and create facility responsibility through compliance certifications and comprehensive evaluations. The principles of clear requirements and responsibilities are also being extended to permitting smaller industrial sources to effectively manage air quality. Inspection and enforcement procedures are being revised to make the compliance program more responsive, timely and consistent.



Sawtooth Mountains-Stanley, Idaho



In order to maintain clean, healthy air, an integrated air quality protection program is used to evaluate all air pollution contributors. DEQ uses information from sources, monitors and on the ground observation to develop airshed management plans that protect public health and to identify sources of pollution that require enhanced management, including sources of smoke and odor for their impacts on public health.

A comprehensive evaluation of our air quality monitoring network will be completed by August 2002. In areas where pollution levels are low, monitoring may be reduced. DEQ will refocus monitoring efforts to provide real time public health alerts in areas of high pollution. Monitoring resources will be redirected to evaluate the risk from toxic air pollutants, where the National Air Toxics Assessment has identified a higher cancer risk.

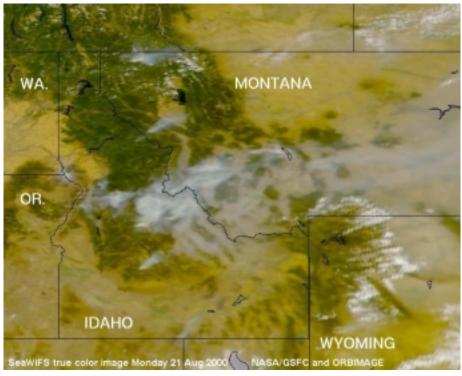


- Focus on scientific tools to support airshed management techniques.
- Collect emissions estimates for 2000 and 2001 for major facilities statewide by June 2004.
- Develop emissions estimates for toxic air pollutants in the Treasure Valley airshed.
- Implement hydrogen sulfide and ammonia monitoring program by deploying atmospheric research stations.
- Improve program for issuing and revising air quality permits.
- Develop plans to move permitting functions to regional offices.
- Expand permit by rule best management practices to include hot mix asphalt and concrete batch plants.
- Provide enhanced inspector training, communication and protocols.
- Improve tracking, monitoring, and database

- reporting of permits and permit requirements.
- Revise Title V fee structure to ensure collection of adequate funding to support program.
- Implement Permit to Construct (PTC) and Tier 2 operating permit application and processing fee provisions.
- Expand mobile monitoring options to respond to public health threats from smoke.
- Provide meteorological and other support to tribes and the Idaho State Department of Agriculture to manage smoke impacts.
- Revise open-burning rule to clarify the allowable conditions, required precautions, and materials that may be burned.
- Provide public access to real-time ambient pollution levels in high-risk airsheds. The focus will be on monitoring of cancer-causing compounds and other airborne toxics.
- Restore public outreach and local involvement components of airshed management.

#### **Reductions:**

- Reduce daily air quality forecasts in Twin Falls, Idaho Falls and Grangeville except for forecasts for smoke management.
- Delay development of Treasure Valley, Portneuf Valley and Clearwater Airshed Management Plans for one year.



This satellite image shows smoke movement from wild fires in Idaho and Montana in August of 2000.

# Ensure Safe Waste Management, Cleanup and Removal at the Idaho National Engineering and Environmental Laboratory (INEEL)

DEQ works with the Department of Energy (DOE) and other agencies to ensure the INEEL is operated in a manner that protects public health and the environment, while making full use of and supporting the Laboratories' technical expertise and resources to address the nation's engineering and environmental challenges. The agencies are working together to address problems created by past activities, as well as ensuring INEEL is complying with legal agreements for waste treatment and removal, and with all applicable regulations.

Idaho has several environmental priorities for the INEEL:

- Solidify tank farm liquids and treat high-level waste for removal from Idaho.
- Continue on schedule shipments of plutonium-contaminated waste for disposal at the WIPP facility in New Mexico.
- Remediate buried plutonium-contaminated and other waste.
- Transfer all spent fuel to dry storage and ultimately remove it from the state.

DEQ tracks DOE's progress in addressing these priorities, evaluates other DOE activities, and

operates an environmental monitoring network on and around the site. Environmental surveillance activities include a sampling program for air, water, soil and milk. DEQ provides the public with independent, factual information about DOE activities and how they affect public health, the environment, and the economy.

DEQ monitors and approves strategies for cleanup, confinement, recycling and destruction of hazardous substances or contaminated materials. The goal of cleanup is to reduce risks posed by contaminated areas to acceptable levels. The agencies evaluate how to cost-effectively reduce threats to human health and the environment, depending on the type and amount of contamination.

Hazardous waste management is regulated by issuance of permits, approval of closure plans for disposal sites, issuance of certifications for closure and compliance assurance inspections. Writing protective permits and ensuring adherence to them prevents future contamination from occurring at the site.



Shipping Spent Nuclear Fuel (SNF) by Train Photo courtesy of INEEL Oversight-Boise



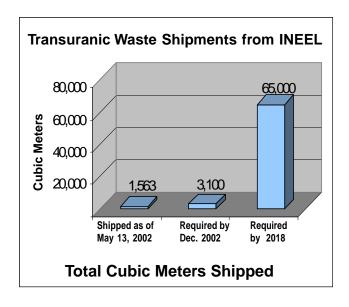
Monitoring Site

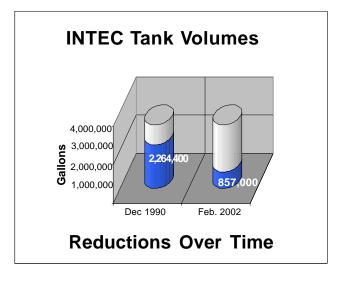
Photo courtesy of INEEL Oversight-Boise

- Monitor and evaluate the adequacy of the INEEL Pit 9 remediation.
- Finalize and approve operational procedures and waste acceptance criteria for the INEEL CERCLA Disposal Facility.
- Finalize and approve draft remedial investigation and risk assessment for buried waste.
- Continue to monitor DOE progress toward restoration of the ground water to drinking water standards at the Test Area North ground water treatment facility.
- Begin development of a permit for a subset of the hazardous liquid waste management systems, and fully permit or close all interim status hazardous waste management facilities according to schedule.
- Provide for regulatory approval and compliant implementation of closure plans for tank farm facility tanks, and approve and initiate closure plans for two of the mixed waste tanks.

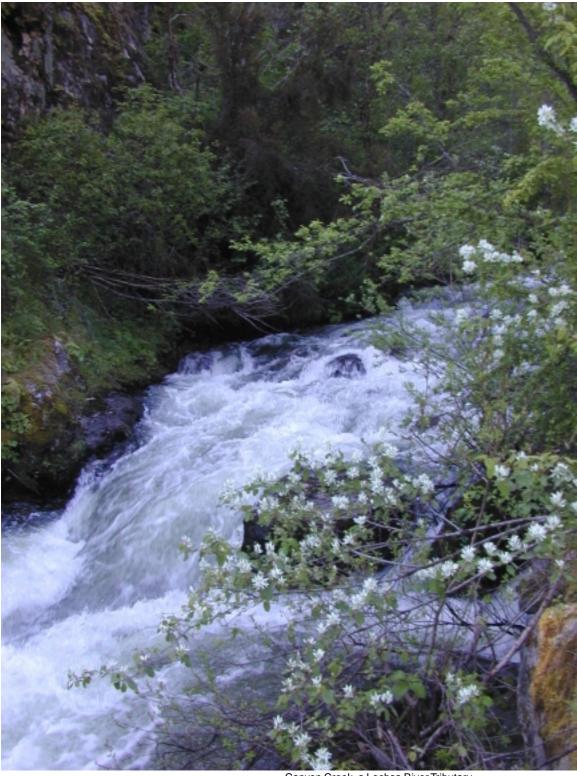


Thousand Springs, Twin Falls, Idaho Photo courtesy of INEEL Oversight-Boise





### **NOTES**





Canyon Creek, a Lochsa River Tributary
Photo taken by BURP Crew, Lewiston Regional Office

Costs associated with this publication are available from the Department of Environmental Quality. DEQ-2002, 30024, 06/2002. Cost per unit: \$2.03